



# Blood Bottles for Pathology tests (UHL Neonatal Units)

University Hospitals of Leicester 

Trust ref: C102/2006

Preservative	Colour	Test Required
EDTA	Red	<p><b>Frequent</b>                      FBC, G6PD screen, haemoglobinopathy screen                      Microarray (also send Li Hep bottle if possible) Gene Analysis / DNA for storage                      Viral PCR /                      Aldosterone &amp; renin (together within 30 mins, not on ICE).                      Alpha-1-antitrypsin genotyping EDTA paired with Alpha-1-antitrypsin level (serum only brown/white top)  <b>Blood Track label on bottle:</b> Blood group / DCT / crossmatch</p> <p><b>Less Frequent</b>                      PTH, send separate EDTA bottle for PTH                      White cell enzymes (Need 5ml volume and to arrive in lab before 12:00 Monday-Thursday only)</p> <p><b>On Ice within 30 mins:</b> ACTH <input type="checkbox"/> (2x bottles)</p>
Lithium Heparin	Orange	<p><b>Frequent</b>                      U&amp;E / LFTs / CRP/ Bone profile / Ca / Mg                      Amino acid profile, Acylcarnitine profile*,                      Galactosaemia screen (Gal-1-PUT)                      Chromosome FISH testing (e.g. urgent trisomy test)</p> <p><b>Less frequent</b>                      Biotinidase (separate bottle), VLCFA,                      7-dehydrocholesterol (protect from light)</p> <p><b>On Ice within 30 mins:</b> Ammonia <input type="checkbox"/></p> <p>*Acylcarnitine: no longer use Guthrie card, Lithium heparin sample sent to Sheffield Lab</p>
Citrate	Green	Coagulation studies, AntiXa Level (Heparin Assay)
Fluoride	Yellow	Glucose, Free fatty acids, $\beta$ -hydroxybutyrate <b>On Ice within 30 mins:</b> Lactate <input type="checkbox"/>

<b>Plain (serum gel)</b> 	<b>White</b>	<b>Frequent</b> Antibiotic assay (e.g. gentamicin) Free T4 and TSH, Cortisol Viral serology (IgM, IgG) Alpha-1-antitrypsin level (serum only, white/brown top) and if genotyping (pair with EDTA)  <b>Less frequent</b> Insulin and C-peptide (to lab within 8 hours) Iron studies / Transferrin /Zinc /Copper/ Folate Cholesterol / lipid profile Immunoglobulins / GH / IGF-1 LH / Progesterone / Prolactin / FSH / Testosterone Vitamins (A, B12, D, E)** Transferrin glycoforms (isoforms) **Vitamin A and E to be delivered on same day of collection 17-hydroxyprogesterone separate white top (gel free) bottle filled 1.2 mL bottle.
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### Key Words

Citrate, EDTA, Flouride, Lithium Heparin, Plain serum gel

The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs. As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

CONTACT AND REVIEW DETAILS			
<b>Guideline Lead (Name and Title)</b> Sumit Mittal - Consultant		<b>Executive Lead</b> Chief Nurse	
<b>Original Authors:</b> Joel Edwards, Divya Saxena, Robin Miralles			
<b>Details of Changes made during review:</b>			
Date	Issue Number	Reviewed By	Description Of Changes (If Any)
Jan 2022	5	Avineet Kaur – Higher Speciality Doctor	<b>Added:</b> <b>EDTA</b> - Handwrite on bottle: Blood group / DCT / crossmatch White cell enzymes (Need 5ml volume and to arrive in lab before 12:00 Monday-Thursday only) Specified 2 bottles needed for ACTH <b>Lithium Heparin</b> - *Acylcarnitine: no longer use Guthrie card, Lithium heparin sample sent to Sheffield Lab <b>Citrate</b> - AntiXa Level (Heparin Assay) <b>Flouride</b> - β-hydroxybutyrate <b>Plain serum gel</b> – Image of bottle added & **Vitamin A and E to be delivered on same day of collection

<p><b>February 2025</b></p>	<p><b>6</b></p>	<p>Robin Miralles</p>	<p><b>EDTA 'frequent' section to now include;</b> Alpha-1-antitrypsin genotyping EDTA paired with Alpha-1-antitrypsin level (serum only brown/white top)  <b>Blood Track label on bottle: (previously</b>  <b>handwrite on bottle</b>  <b>'less frequent' PTH previously (to lab in 6</b>  <b>hours but can store at 4°C overnight), now;</b>  <b>send</b> separate EDTA bottle for PTH  <b>Lithium Heparin section Removed Insulin &amp; C-</b>  <b>peptide</b>  <b>Plain serum gel – Alpha-1-antitrypsin, removed</b>  <b>phenotype , replaced with</b> (serum only, white/brown top)          Insulin and C-peptide (to lab within 8 hours)          Added; 17-hydroxyprogesterone separate white top (gel free) bottle filled 1.2 mL bottle to Vit A &amp; E section</p>
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